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**Messages: Proposed Examiner's Amendment for 09/689,952
(Attorney Docket No. 21715/1010)**

Examiner's Amendments to the Claims:

Cancel claims 67 and 68.

Claims 26, 53, 59 and 74 have been amended as follows:

26. (Currently amended) A method for inhibiting bacterial growth, comprising contacting bacteria *in vitro* with an amount of an inhibitor effective to reduce the a DnaI activity of a polypeptide comprising the amino acid sequence of SEQ ID NO: 16, wherein said inhibitor inhibits bacterial growth.

53. (Currently amended) A method for inhibiting bacterial growth, comprising contacting bacteria *in vitro* with an effective amount of an inhibitor that decreases the a DnaI activity of a polypeptide selected from the group consisting of:

- a polypeptide comprising the amino acid sequence of SEQ ID NO: 2;
 - a polypeptide comprising the amino acid sequence of SEQ ID NO: 16; and
 - a polypeptide comprising the amino acid sequence of SEQ ID NO: 18,
- wherein said inhibitor inhibits bacterial growth.

59. (Currently Amended) A method for inhibiting bacterial growth, comprising contacting a bacteria *in vitro* with an amount of an inhibitor effective to decrease the activity of a polypeptide selected from the group consisting of:

- a DnaI polypeptide comprising at least ~~75%~~ 50% identity ~~over 50 or more~~ amino acids to the amino acid sequence of SEQ IID NO: 2;
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 2;~~

- ~~— a DnaI polypeptide comprising at least 75% identity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 16;~~
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 16;~~
- ~~— a DnaI polypeptide comprising at least 75% identity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 18;~~
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 18; and~~
- a DnaI polypeptide comprising fragments comprising an amino acid sequence having at least 50 contiguous amino acids from of the amino acid of SEQ ID NO: 2; SEQ ID NO: 16; and SEQ ID NO: 18;

wherein said polypeptide has an activity selected from the group consisting of:

- a) directly interacting with bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof in a manner that results in at least 10 fold reduction of ³H-thymidine incorporation in a bacterial DNA replication assay relative to ³H-thymidine incorporation in an assay lacking bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof;
- b) directly interacting with bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof in a manner that results in at least 10% inhibition of plasmid replication by bacteriophage 77 ORF 104 protein or a DnaI-binding fragment in a plasmid replication assay; and
- c) aiding in the loading of *S. aureus* DnaC helicase onto replicative primosomes,

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wherein said inhibitor inhibits bacterial growth.

74. (Currently Amended) A method for inhibiting bacterial DNA synthesis, comprising contacting a bacterium *in vitro* with an effective amount of an inhibitor which decreases the activity of a polypeptide selected from the group consisting of:

- a DnaI polypeptide comprising at least 75% 50% identity ~~over 50 or more~~ amino acids to the amino acid sequence of SEQ ID NO: 2;
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 2;~~
- ~~— a DnaI polypeptide comprising at least 75% identity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 16;~~
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 16;~~
- ~~— a DnaI polypeptide comprising at least 75% identity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 18;~~
- ~~— a DnaI polypeptide comprising at least 85% similarity over 50 or more amino acids to the amino acid sequence of SEQ ID NO: 18; and~~
- a DnaI polypeptide comprising fragments comprising an amino acid sequence having at least 50 contiguous amino acids from of the amino acid of SEQ ID NO: 2; SEQ ID NO: 16; and SEQ ID NO: 18;

wherein said polypeptide has an activity selected from the group consisting of:

- a) directly interacting with bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof in a manner that results in at least 10 fold reduction of ^3H -

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thymidine incorporation in a bacterial DNA replication assay relative to ^3H -thymidine incorporation in an assay lacking bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof;

b) directly interacting with bacteriophage 77 ORF 104 protein or a DnaI-binding fragment thereof in a manner that results in at least 10% inhibition of plasmid replication by bacteriophage 77 ORF 104 protein or a DnaI-binding fragment in a plasmid replication assay; and

c) aiding in the loading of *S. aureus* DnaC helicase onto replicative primosomes,

wherein said inhibitor inhibits bacterial DNA synthesis.